

## Between the Craters – A Lunar Governance Simulation (Aurora Basin, 2038)

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**Playtested by over forty senior experts from government, space agency, commercial, academic, media, and scientific sectors worldwide.**

*Between the Craters* is a high-level **lunar governance and strategy simulation** set in **2038**, examining how states, industries, and coalitions behave when norms fail to keep pace with technology. The setting, the fictional **Aurora Basin**, a volatile, resource-rich region near the lunar South Pole, has become the most politically contested site on the Moon, where scientific, commercial, and geopolitical ambitions overlap.



The simulation was playtested by **over forty participants** from across the global space community **on the sidelines of the 2025 International Astronautical Congress (IAC) in Sydney**. The session was hosted by the **Open Lunar Foundation** in collaboration with the **Secure World Foundation, Dark Matter Labs, and the Foresight Institute**.

Participants represented a **truly global cross-section** of

the field- drawn from **North and South America, Europe, Africa, the Middle East, East and South East Asia, and Oceania**, and included **senior representatives from governments, national space agencies, international organisations, commercial space companies, media, academic institutions, NGOs, and policy think tanks**.

The event gathered **scientists, diplomats, legal experts, and industry professionals** to explore how **lunar governance challenges and norms evolve under strategic competition and uncertainty**. This interdisciplinary mix enabled participants to experience firsthand how **technical decisions, political incentives, and media framing** interact to shape perceptions of **legitimacy, responsibility, and leadership** in space.

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### Scenario Overview

The scenario is grounded in **realistic near-term geopolitical and space governance forecasts**, extrapolating from current trends in great power competition, economic fragmentation, and institutional fatigue. It assumes **no outbreak of peer conflict** by the 2030s, but a deepening of strategic rivalry, economic crisis, and political polarisation. **Multilateral space governance mechanisms have stalled**, and no new lunar frameworks have emerged since the 2020s. As a

result, the Basin operates under **custom, ambiguity, and self-declared operational zones**, with no widely agreed-upon understanding of what constitutes responsible conduct.

Three primary teams dominate play:

- **The Concordium**, a populist-led democratic coalition presenting its lunar expansion as proof of technological leadership and responsible governance. Its leadership is politically dependent on high-visibility “wins” abroad as domestic pressures grow.
- **The Celestian Pact**, a populist, non-democratic, science-first bloc that claims to uphold responsible exploration but quietly uses surveillance, control, and secrecy to maintain its influence.
- **The Cradle Space Cooperative (CSC)**, a coalition of Global South states demanding fairness and inclusion. Marginalised by the great powers, it wields moral legitimacy and diplomacy to expose hypocrisy and force recognition.

Across all three blocs, **populist and domestic political pressures** are central to decision-making. Media and public opinion reward visible success and punish hesitation. Every achievement must be performed for both international audiences and restless citizens at home. Journalists, populists, and diplomats become as decisive as rovers and reactors.

Decisions in Aurora Basin also **echo back to Earth**. Headlines, outrage, sanctions, and domestic fallout can transform local incidents into international crises. Participants experience how political feedback loops- between lunar operations, media coverage, and public opinion- reshape seemingly rational choices into reactive or escalatory ones.

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## Simulation Design Philosophy

*Between the Craters* is designed not to predict conflict, but to illuminate how **ambiguity, perception, and political incentives** shape decision-making in the absence of shared governance. It tests how rational actors under pressure can still create irrational outcomes.

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## Core Premise

By the late 2030s, humanity’s return to the Moon has outpaced its governance. The **Outer Space Treaty** and UN frameworks have proven too slow and divided to manage an environment of permanent infrastructure, mobile habitats, and resource extraction. Article XI information-sharing remains inconsistent; voluntary transparency is the exception rather than the norm. States operate under **self-defined interpretations** of responsibility, transparency, and non-appropriation.

This scenario assumes that, while **open conflict between great powers has been avoided**, the world has continued to fragment politically and economically, courtesy of geopolitical competition and climate-change-driven insecurity.

- **Multilateral governance has stalled:** UNCOPUOS remains divided; no new significant agreements on resources, safety zones, or benefit-sharing have been reached.
- **Bloc competition has intensified:** Lunar activity has become a proxy for global prestige and influence.

- **Domestic populism drives policy:** Governments rely on spectacle and symbolic “firsts” to sustain public approval amid increasing domestic economic, political, and security pressures.

Within this fractured landscape, the **Concordium** has positioned itself as the architect of a pragmatic, commercialised lunar future. Its **surface fission reactor**, the first permanent power unit beyond any base-camp perimeter, symbolises its claim to leadership. To its rivals, it is a land grab masquerading as science.

The **Celestian Pact**, fearful of losing credibility, champions its 2035 scientific outpost as proof of responsible stewardship for all humanity. Yet beneath this veneer lies an extensive **dual-use intelligence network** monitoring Concordium’s lunar operations. Its challenge is to preserve legitimacy while maintaining strategic operations that are at odds with its rhetoric.

The **Cradle Space Cooperative (CSC)**, lacking hardware and fearing it is being left behind from future opportunities, CSC champions tangible equity, fairness and access to the Moon for all. Through politics and diplomacy, it aims to force its way into the governance conversation. CSC’s survival depends on being seen, heard, and respected; if it cannot win legitimacy, it vanishes from relevance.

Ambiguity defines the Basin. **Safety/Operational zones are unilateral and unclear, the intent behind rover movements and activities is blurred**, and **long-term infrastructure blurs lines** between development, safety and sovereignty. Neither Celestian nor Concordium discloses the full coordinates of its assets, and rumours fill the gaps left by silence. The **information fog** mirrors real-world governance realities- where data is partial, trust is fragile, and perception can be more powerful than evidence.

As political pressure mounts, misinterpretation becomes inevitable. A seismic reading, a dust plume, or a heat signature can be spun into proof of intrusion or deceit. Each turn forces players to balance operational needs, domestic stability, and international legitimacy- knowing that every choice risks escalation.

2038 represents a plausible **flash point**: far enough for permanent infrastructure and commercial extraction to exist, yet near enough that today’s institutions, political styles, and human flaws still dominate decision-making.

*Between the Craters*, therefore, functions as a **microcosm of future space politics**- a world where ambition exceeds governance, where prestige substitutes for cooperation, and where leadership is as much about narrative as capability.

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## Gameplay and Mechanics

- **Turns (20–30 min each):** 3 Phases per turn- Situational update → Team discussion and decisions → Media & populist phase.
- **Imperfect Information:** Teams never see the full map; surveillance, leaks, and framing shape perception, while cooperating and sharing information can ease tensions- if trusted.
- **Injects:** Trigger dynamic events- reactor anomalies, surveillance detections, or diplomatic leaks- that force trade-offs between political gain and reputational risk.

- **Reputation Trackers:**
    - **Domestic Reputation** (private): scored by each bloc's domestic media. Falling to *Severe Backlash* = automatic loss.
    - **International Reputation** (public): scored by the international press; determines perceived legitimacy and leadership, with extra importance for CSC
  - **Sandbox:** The game is designed to facilitate teams experimenting freely with activities, ideas, and concepts limited only by their budgets...and politics... and bloc's technical capacity.
  - **Hidden Objectives:** Each team's hidden objectives add strategic and leadership-mandated demands whose meeting is key, but that are often at odds or present risks for other domestic and international objectives. This simulates how the lunar environment, as an increasingly crowded and important domain of activity, will have to accommodate the increasing involvement, strategic needs, and demands from a wider array of often more-influential established government stakeholders (such as Intelligence Agencies, Cabinet Offices, Treasuries).
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## Player Roles

Can have real-world roles allocated for complex playthroughs, or to facilitate a larger group, abstracted to:

- **Delegations** – Manage lunar operations, strategy, and diplomacy.
  - **Populist Politicians** – Apply pressure, leak, and spin to shape domestic perception.
  - **Domestic Media** – Score each team's public approval and legitimacy.
  - **International Media Pool** – Score all teams publicly, defining global narrative control.
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## Victory and Scoring

Teams succeed by balancing **domestic stability** with **international legitimacy**, ending as an **acknowledged "Standard-Setter."**

- Positive domestic + international scores = influence and credibility.
  - Negative scores = backlash, isolation, or instability.
  - For CSC, dropping below "Isolated Actor" on the international tracker = automatic loss.
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## Themes and Learning Goals

### Themes

- **Governance under ambiguity-** Players operate with incomplete information and overlapping mandates, confronting how scientific, commercial, and security activities blur into one another. The scenario tests how uncertainty and dual-use capability drive mistrust and miscalculation.

- **Framing, perception and media influence-** Populists, journalists, and public audiences transform technical actions into political narratives. Teams must manage optics and credibility amid competing domestic and international interpretations.
- **Transparency vs security-** Actors weigh the reputational benefits of openness against the risks of exposure. Transparency can enhance legitimacy but also reveal vulnerabilities; secrecy protects assets but fuels suspicion.
- **Multilateral fragility and bloc politics-** Aurora Basin reflects a world where multilateral mechanisms have faltered and governance is contested through competing blocs. Players explore how power, legitimacy, and coalition-building replace formal law.
- **Populism and geopolitics-** The scenario demonstrates how domestic populist pressures and global competition reinforce each other. Participants experience how prestige-driven politics and strategic rivalry interact to distort rational policymaking.
- **Information asymmetry and fog of governance-** Imperfect data, delayed reporting, and ambiguity create conditions where perception, not fact, drives reaction. The simulation reveals how crises emerge from misinterpretation rather than malice.
- **Norm entrepreneurship and strategic restraint-** Players test how norms can be established, contested, or manipulated through language, behaviour, and credibility rather than enforcement mechanisms.
- **Interconnection of Earth and lunar geopolitics-** Actions in Aurora Basin reverberate back to Earth through domestic outrage, sanctions, or diplomatic fallout. The scenario explores how space politics and terrestrial legitimacy are inseparable.

### Learning Objectives

- **Identify current gaps in lunar governance and policy**, including unclear standards for safety zones, the management of dual-use assets, the deployment of nuclear power on the lunar surface, and the contested definition of “science.”
- **Understand how Earth-based geopolitical spill-over, low-trust environments, and domestic populist politics** can pressure and distort space decision-making.
- **Explore how international norms form**—through framing and both collaboration and contestation, and how legitimacy can be claimed, built, or undermined.
- **Recognise how emerging space actors can use diplomacy and narrative framing** to challenge established players, shape discourse, and gain influence.
- **Experience how quickly narratives can be weaponised and managed** in a confusing, information-sparse environment.